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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,570	07/27/2001	Wesley Wilkinson	1674/43755CO	9318

7590 11/16/2005  
CROWELL & MORING, L.L.P.  
P. O. Box 14300  
Washington, DC 20044-4300

EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT PAPER NUMBER

3618

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.		Applicant(s)	
	09/915,570		WILKINSON, WESLEY	
	Examiner		Art Unit	
	Christopher Bottorff		3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 23,25-29,32,34,35,37,39,40 and 48-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23,25-29,32,34,35,37,39,40 and 48-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

The amendment filed September 27, 2005 has been entered. Claims 1-22, 24, 30, 31, 33, 36, 38, and 41-47 are canceled. Claims 23, 25-29, 32, 34, 35, 37, 39, 40, and 48-59 are pending.

#### ***Claim Rejections - 35 USC § 112***

Claims 23, 25-29, 32, 34, 35, 37, 39, 40, and 48-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28, 29, 48, 49, 51, 54, and 58 each recite the limitation "the fixed wheel" in lines 2, 3-4, 8, 8, 9, 6, and 7 respectively. There is insufficient antecedent basis for this limitation in the claims. For the purposes of examination, "the fixed wheel" has been interpreted such that the term "fixed" is deleted consistent with the amendments to the claims.

Claims 52 and 57 each recite the limitation "said trolley wheel(s)" in lines 6 and 3 respectively. There is insufficient antecedent basis for this limitation in the claims. Also, claim 52 recites the limitation "comprising a having" in line 5 and claim 57 recites the limitation "a plurality of having" in line 2, which do not define the structure "having" the fixed axis. For the purposes of examination, claim 52 has been interpreted as reciting "...a control wheel assembly comprising a wheel having a fixed axis of rotation with respect to the trolley (fixed) at a position..." in lines 5 -6. Also, claim 57 has been

interpreted as reciting "...a plurality of wheels that each have a fixed axis of rotation with respect to the trolley..." in lines 2-3.

Claims 55 and 56 each recite the limitation "a plurality of wheels having a fixed axis of rotation" in lines 4-5 and 5-6 respectively. This does not clearly establish whether the entire plurality of wheels has only one fixed axis between all of the wheels or if each wheel of the plurality has an individual, corresponding fixed axis. Since the disclosure suggests that each wheel has an individual, corresponding fixed axis, claims 55 and 56 have been interpreted as reciting "a plurality of wheels, each wheel having a fixed axis" in lines 4-5 and 5-6 respectively, for examination purposes.

Claim 59 recites "two wheels" on line 4 and "a fixed wheel" on line 8. The deletion of "fixed" between "two" and "wheels" but not between "a" and "wheel" suggests that the fixed wheel is distinct from the two wheels and a gas strut is not coupled to either of the two wheels. However, such an arrangement is not supported by the disclosure. Since the disclosure suggests that a gas strut is coupled to each of the two wheels, claim 59 has been interpreted such that "fixed" is deleted on line 8, for examination purposes.

Furthermore, each independent claim was amended to define a gas strut that is positioned perpendicular to a fixed axis of a wheel. The disclosure presents two axes associated with the control wheel assembly, but neither of these axes is clearly defined by the present claims. The first axis is rotational axis 12, which is horizontal and is perpendicular to the gas strut. However, rotational axis 12 is not "fixed" with respect to the trolley, as required by the claims, since the gas strut allows the axis to move up and

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down relative to the trolley. The second axis is the fixed axis discussed in lines 28-32 of page 7 of the specification. Although this axis is "fixed" with respect to the trolley, this axis is vertical and, thus, parallel to the gas strut rather than perpendicular. For the purposes of examination, the claimed "fixed axis" has been interpreted as being the rotational axis, which is perpendicular to the gas strut. Since the rotational axis is not "fixed" with respect to the trolley, the claims have been interpreted such that the rotational axis is "fixed" with respect to the wheel mounting bracket 13.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 25-29, 32, 34, 35, 37, 39, 40, and 48-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of the admitted prior art (Stabilus Gas Springs Technical Information).

Lloyd discloses a trolley with a control wheel assembly and having a longitudinal axis of travel and an array of four castors that are disposed at the corners of the trolley (see figure 1). The assembly includes a wheel 34 positioned in a region where the load center of the trolley and the center of the array of castors coincide. The wheel 34 rotates about a horizontal axis 35 but cannot rotate about a vertical axis (see figure 3 and page 4, lines 27-28). Wheel axis of rotation 35 is fixed with respect to wheel mounting bracket

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37. A strut assembly is provided having a first part 36 connected to a member which rotatably supports the wheel 34 at axis 35 and a second part 39 which is fixed in use to the trolley (see figure 3). A lifting means 48 is provided for lifting the wheel 34 out of contact with the ground (see figure 3 and page 3, lines 6-10). Also, a biasing and damping means 43 is provided with the wheel 34 and is independent of the castors. The biasing and damping means is positioned perpendicular to fixed axis 35 (see figure 3). In that the wheel 34 and biasing and damping means are centrally located, the biasing and damping means has a castor wheel on each side. The biasing and damping means is biased downward towards a surface on which the trolley is intended to travel and is operable to provide controlled contact between the wheel 34 and the surface. A force provided by the biasing and damping means is independent of the load on the trolley, is less than a weight on an empty trolley, and the force of the bias means does not exceed the weight of an empty trolley (see figure 1 and page 5, lines 1-5).

In addition, providing a plurality of wheels that each have a fixed axis or rotation and a biasing and damping means is taught by Lloyd (see page 9, lines 22-24) and represents an obvious duplication of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of wheels, each with a fixed axis or rotation and damping and biasing means, in order to improve the degree of control in the trolley.

However, Lloyd lacks a self-contained gas strut as the biasing and damping means.

In the interviews conducted on May 16, 2000 and August 2, 2000, Applicant admitted that the claimed self-contained gas strut was a prior art design of the type demonstrated in the interviews and described in the Stabilus Gas Springs Technical Information publication. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the spring of Lloyd with the admitted prior art gas strut in order to provide counterbalance and force assistance to the wheel 34 and to gain the art recognized benefits of a gas spring vis-à-vis a mechanical spring. The claimed functional characteristics of the biasing and damping means (i.e.: the biasing force being independent of the load on the trolley, less than a weight on an empty trolley, and not exceed the weight of an empty trolley) are also true in this combined system.

Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrand et al. US 5, 802,640 in view of the admitted prior art (Stabilus Gas Springs Technical Information).

Ferrand et al. disclose a control wheel assembly adapted to be fitted to a trolley having a longitudinal axis of travel and an array of castors having respective castor wheels. The control wheel assembly comprises two wheels 646 with each wheel having a fixed axis of rotation (extending centrally through wheel 646 and the lower end of the mounting bracket) with respect to a wheel mounting bracket (disposed between rod 648 and wheel 646) and with each wheel 646 adapted to be disposed in use on a side of a trolley chassis. See Figures 1 and 102 and column 49, line 66, through column 50, line

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17. Two damping and biasing means, in the form of compression springs 653, are provided independent of the castors with each compression spring being coupled to a wheel 646 and being operable to provide controlled contact between the wheel 646 and a surface on which the trolley is intended to travel. Each biasing and damping means is positioned perpendicular to a fixed axis. A force provided by the springs is independent of a load of the trolley and is less than a weight on an empty trolley. Also, note that there are two wheels and springs since one is located on each side of the bed.

Ferrand et al. do not disclose self-contained gas struts in place of the springs. However, the admitted prior art design of the type demonstrated in the interviews and described in the Stabilus Gas Springs Technical Information publication teaches the desirability of utilizing a self-contained gas strut as a damping and biasing means. From the teachings of the admitted prior art as described in the Stabilus Gas Springs Technical Information publication, replacing each of the springs 653 of Ferrand et al. with the admitted prior art self-contained gas strut would have been obvious to one of ordinary skill in the art at the time the invention was made. This would provide counterbalance and force assistance to the wheel and would gain the art recognized benefits of a gas spring vis-à-vis a mechanical spring.

### ***Response to Arguments***

Applicant's arguments filed September 27, 2005 have been fully considered but they are not persuasive. As described in the rejections above, the claims do not



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conform with the requirements of 35 USC 112, second paragraph, and the claims do not distinguish over the prior art.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

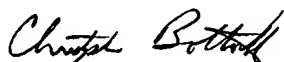
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

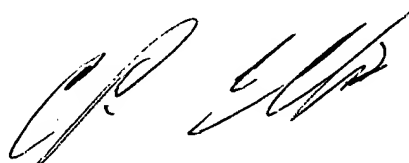
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff



CHRISTOPHER B. BOTTORFF  
SUPERVISOR, PATENT EXAMINER  
TECHNICAL CENTER 3600